Heart Disease Analysis Report



Introduction

Heart disease, also known as cardiovascular disease, encompasses a range of conditions that affect the heart and blood vessels. It is a major public health concern, affecting millions of people worldwide.

Discuss the importance of health as real wealth and also Mention the brute effects of the people disease status.

Introduce the project goal: to analyze heart disease diagnostic data for better future preparedness.

Overview of Heart Disease

- Perform ETL (Extract, Transform, Load) on heart disease diagnostic data.
- Conduct Exploratory Data Analysis (EDA) using Python to uncover insights such as heart disease rates by gender and age.

Compare attributes within the dataset to extract meaningful information.

Create a comprehensive dashboard showcasing key metrics, factors, and relationships.

Dataset Attribute Details

- age
- sex
- Cp chest pain type (4 values)
- trestbps resting blood pressure
- chol serum cholesterol in mg/dl
- fbs fasting blood sugar > 120 mg/dl
- restecg resting electrocardiographic results (values 0,1,2)
- thalach- maximum heart rate achieved
- exang exercise-induced angina
- oldpeak ST depression induced by exercise relative to rest
- slope the slope of the peak exercise ST segment
- ca number of major vessels (0-3) colored by flourosopy
- thal: 0 = normal; 1 = fixed defect; 2 = reversable defect

Key Metrics:

- Identify and present key metrics such as average cholesterol levels, average blood pressure, etc., among heart disease patients.
- Discuss the relationships between these metrics and heart disease diagnosis (e.g., correlation between cholesterol levels and heart disease).
- Recap the main findings from the analysis, such as which factors are most strongly associated with heart disease.



My Design

Highlight key features of the dashboard, such as filters, drill-downs, and dynamic visualizations.





Conclusion

Critical Factors: Cholesterol levels, blood pressure, and age are major indicators of heart disease risk.

Gender Disparity: Males exhibit a higher incidence of heart disease compared to females.

Age Correlation: The risk of heart disease increases with age.

Exercise Impact: Exercise-induced angina and higher oldpeak values are strongly linked to heart disease.

These insights highlight the importance of data analytics in understanding heart disease, aiding in targeted prevention, and improving patient outcomes.

Thank You